

ON-THE-FLY BEAM PATH ERROR CORRECTION FOR MEMORY LINK PROCESSING

Abstract of the Disclosure

Laser beam positioners (300, 340) employ a steering mirror (236, 306) that performs small-angle deflection of a laser beam (270) to compensate for cross-axis (110) settling errors of a positioner stage (302). A two-axis mirror is preferred because either axis of the positioner stages may be used for performing work. In one embodiment, the steering mirror is used for error correction only without necessarily requiring coordination with the positioner stage position commands. A fast steering mirror employing a flexure mechanism and piezoelectric actuators to tip and tilt the mirror is preferred in semiconductor link processing ("SLP") applications. This invention compensates for cross-axis settling time, resulting in increased SLP system throughput and accuracy while simplifying complexity of the positioner stages because the steering mirror corrections relax the positioner stage servo driving requirements.

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